Update Alert: Firmware updates are posted on the web on a regular basis. We recommend that you check for firmware and/or install guide updates prior to installing this product.

Installation Guide

This guide supports the installation of a DBALL in Remote Start Ready (RSR) mode using a Plug & Play (TLTH1) T-Harness (Optional). This solution offers three (3) configuration options to control your system; 3x OEM Lock Remote Start Activation*, RF Kit or SmartStart (all sold separately). Refer to pages 14-15 for a list of RF kits and their part numbers.



*3x OEM Lock Remote Start Activation is a feature that allows users to control the aftermarket remote starter using the factory (OEM) remote control. See **page 3** for more information.

Note: Only available on certain models, check the Vehicle Application Guide for compatibility with specific year and model.

RSR

Remote Start Ready (RSR) is a function that enables the interface module to remote start the vehicle completely on its own. Consequently, there is no need for an aftermarket or an OEM remote starter in order to start the vehicle from a distance.

Important!
This product is NOT compatible with vehicles equipped with a manual transmission.

LEXUS TOYOTA

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SmartStart Compatible

SmartStart 200/250 **Revision B** is equipped with D2D, which means it can be connected to an interface module and used in Remote Start Ready (RSR) mode without the use of a remote starter. See the **Module Programming** section for more information.

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Vehicle Application Guide

The following table lists the vehicles and features which are compatible with this product. The number assigned to each year allows you to determine which installation type should be used for your vehicle.

Vehicles	2013	2012	2011	2010	2009	2008	2007	AV-Auto Headlamp Shutoff	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Driver Priority Unlock	DL-Trunk / Hatch Release	PK-Immobilizer Bypass-Data No Key Req'd	PK-Push To Start Ignition Compatible	RS-3x LOCK START (Start control using OEM Remote)	RS-Accessory Activation	RS-Ignition Activation	RS-Remote Start Ready	RS-SmartStart	RS-Start (Crank) Activation	RS-Tach / RPM Output	SS-Entry Monitoring ALL Door Pins	SS-Entry Monitoring Driver Door Pin	SS-Entry Monitoring Hood Pin	SS-Entry Monitoring Trunk/Hatch Pin	SS-Factory Alarm Trigger Monitoring	ST-Brake Status (foot brake)	ST-Ignition Status
Lexus																														
ES 350 (Smart Key)		2	2	2	2	2	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Toyota																														
Camry (Smart Key)			2	2	2	2	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Camry Hybrid			2	2	2	2	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Corolla (Smart Key)	1	1	1	1	1				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Highlander (Smart Key)	2	2	2	2	2	2		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Highlander Hybrid	2	2	2	2	2	2		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RAV4 (Smart Key)		1	1	1	1			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Legend:

•: D2D and W2W

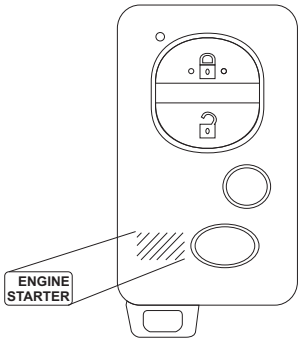
AV: Horn & Lights Controls
DL: OE Door Lock & Alarm Controls
PK: Transponder & Immobilizer Override
RS: Engine Start & Status
SS: Entry Point Status-Security
ST: Function/Feature Status

Note: Keyless and Smart Key will remain functional during remote start.

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How to Know if the Vehicle is Equipped with an OEM Remote Starter

1- An “ENGINE STARTER” sticker should be on the remote.



2- Remote start the OEM remote starter:
Press the remote control’s lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.

The parking lights flash after 3 seconds. The engine starts and the parking lights flash repeatedly for 20 seconds.

 **x2** **&**  **Press & Hold for 3 seconds**

If the Vehicle is Equipped with an OEM Remote Starter

If the vehicle is equipped with an OEM remote starter, the DBALL will detect it and will program into convenience only (no bypass)*. The reason for this is to allow aftermarket security to be installed while keeping the factory remote starter active. If you wish to use DBALL to control the remote start sequence, the factory remote starter must be disconnected before programming the DBALL as both modules cannot coexist.

Locating the OEM remote starter

Installation Type	Vehicle	OEM Remote Starter & Connector Location
2	**Toyota Camry (Smart Key) 2007-2011**	Behind glove box & Passenger kick panel
2	**Toyota Camry Hybrid (Smart Key) 2007-2011**	Behind glove box & Passenger kick panel
1	**Toyota Corolla (Smart Key) 2009-2011**	Behind glove box & Passenger kick panel & Junction Box & Steering column
2	**Toyota Highlander (Smart Key) 2008-2011**	Behind glove box & Passenger kick panel
2	**Toyota Highlander Hybrid (Smart Key) 2008-2011**	Behind glove box & Passenger kick panel
1	**Toyota Rav4 (Smart Key) 2009-2011**	Behind glove box & Junction Box

* The DBALL will light up orange for 3 seconds after programming or power up to indicate the bypass is not active.
Refer to LED Diagnosticsand Troubleshooting section for more information.

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Installation Type 1a (with T-Harness)

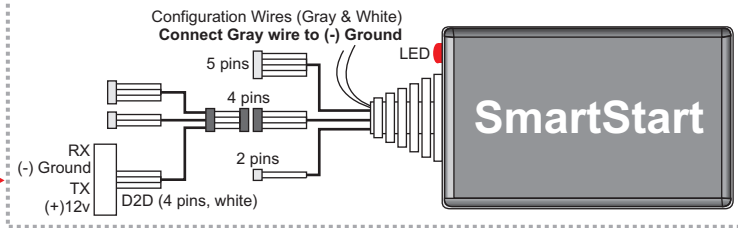
See page 6 for help on locating key components in the vehicle and wiring reference chart.

The **optional** XL202 and antenna (See RF Kits on pages 14-15) are not included and MUST be purchased separately.



OR

SmartStart is **optional** and not included. It MUST be purchased separately.



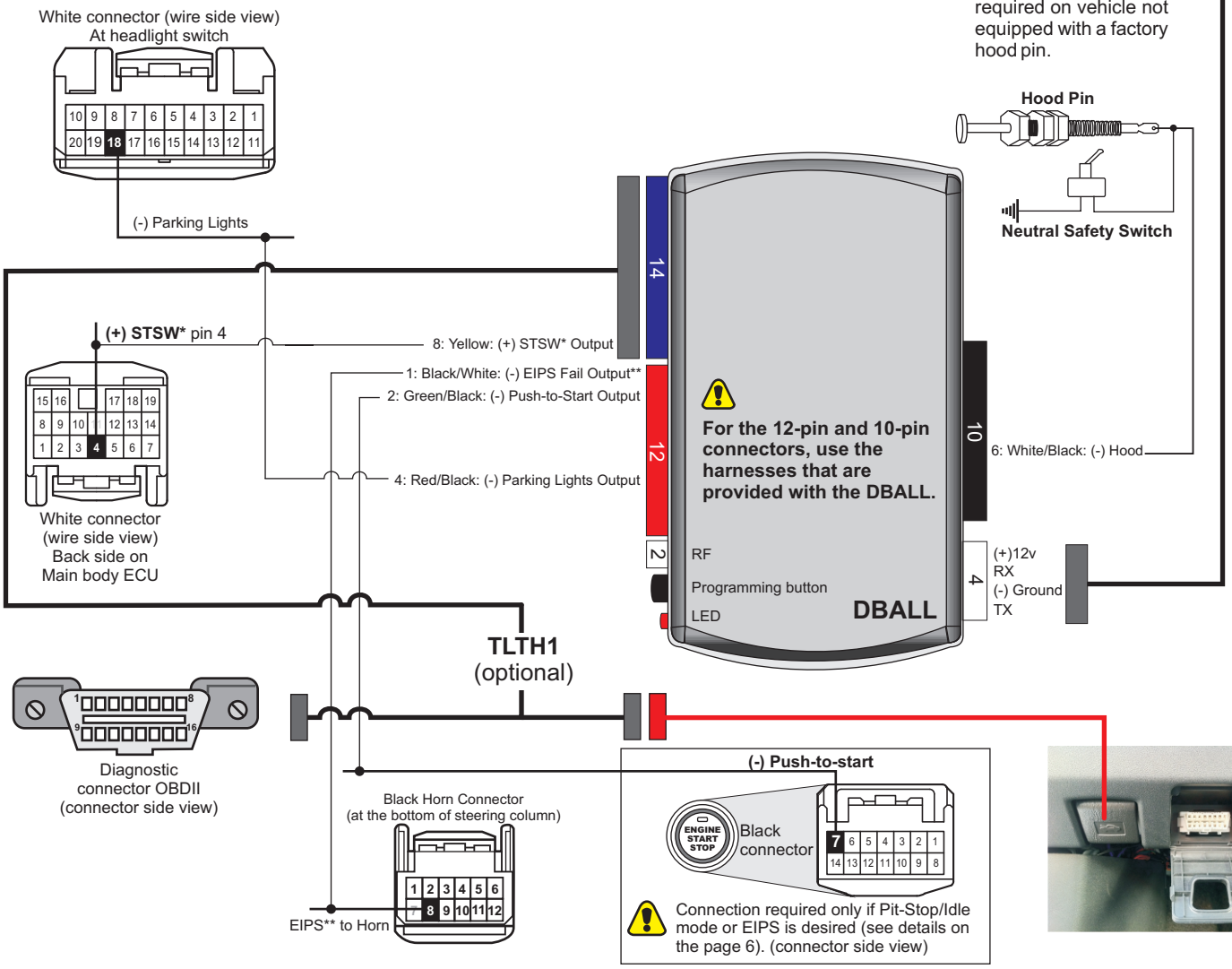
Note: it is important to use the 4-pin cable that comes with XL202 and not with DBALL.

XOVER CABLE

Do **NOT** connect the power and ground wires to the 2-pin harness of the SmartStart module; this will damage DBALL.

You can either connect to an XL202 module or to a SmartStart module.

Note: Hood pin only required on vehicle not equipped with a factory hood pin.



* **STSW**: Starter Switch Wire
** This connection is only required when EIPS feature is activated or horn will sound when handbrake is applied.

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Installation Type 1b (without T-Harness)

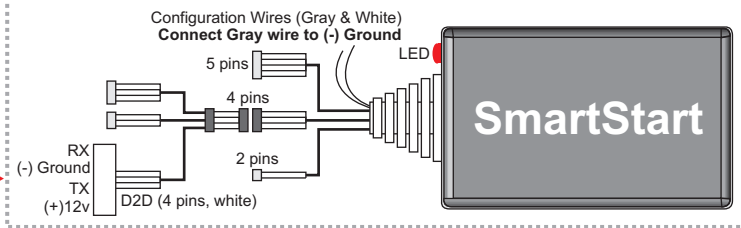
See page 6 for help on locating key components in the vehicle and wiring reference chart.

The **optional** XL202 and antenna (See RF Kits on pages 14-15) are not included and MUST be purchased separately.



OR

SmartStart is **optional** and not included. It MUST be purchased separately.



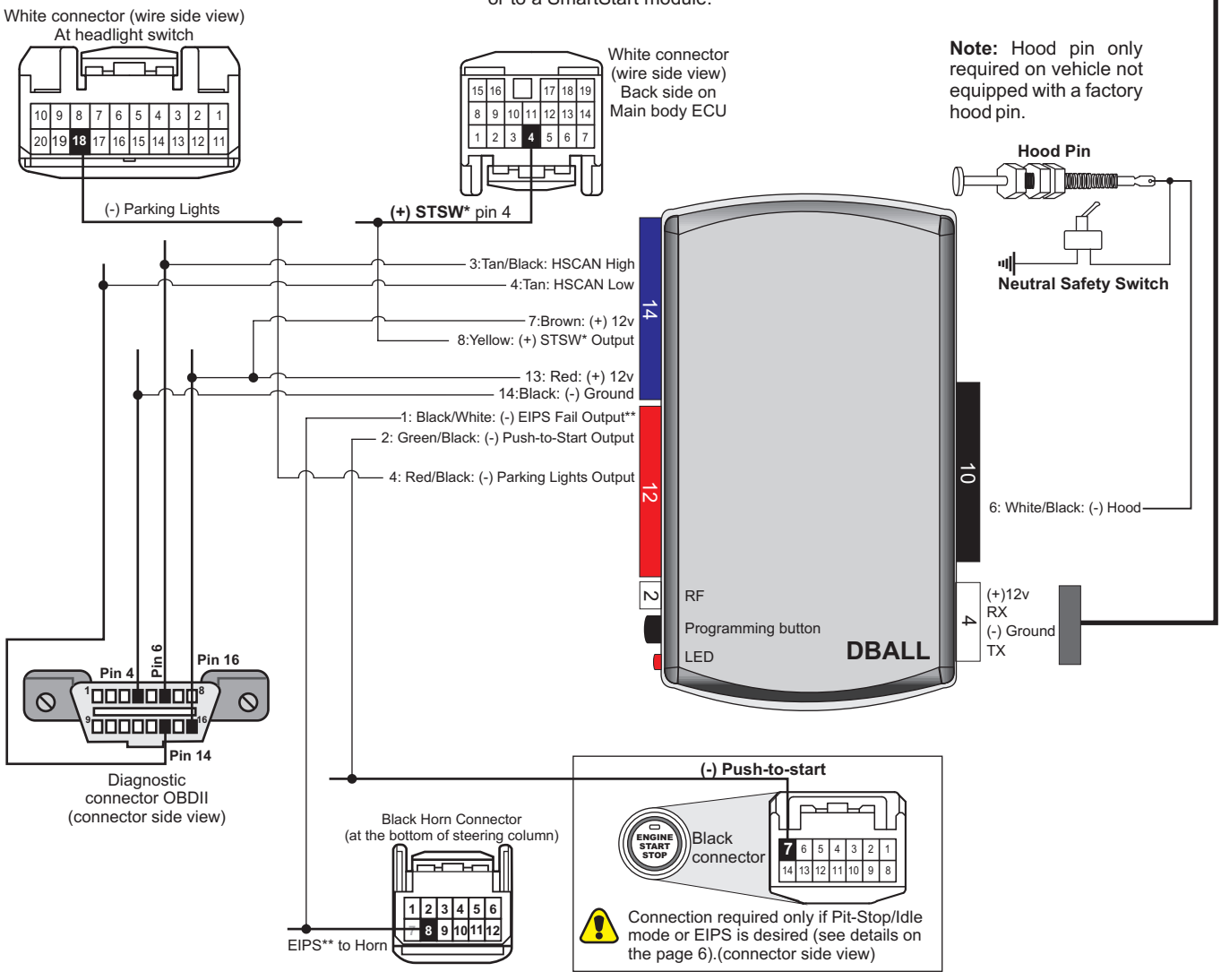
Note: it is important to use the 4-pin cable that comes with XL202 and not with DBALL.

XOVER

CABLE

Do **NOT** connect the power and ground wires to the 2-pin harness of the SmartStart module; this will damage DBALL.

You can either connect to an XL202 module or to a SmartStart module.



* **STSW**: Starter Switch Wire

** This connection is only required when EIPS feature is activated or horn will sound when handbrake is applied.

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Vehicle Wiring Reference Chart - Type 1

Vehicles	Wire function	Connector	Pin position	Wire color
Toyota Corolla (Smart Key) 2009-2012	CAN High	Diagnostic Conn.	6	Light Green
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	White
	STSW*	E52 at ECU	4	Black or White
	12V	Diagnostic Conn.	4	N/A
Toyota RAV4 (Smart Key) 2009-2012	CAN High	Diagnostic Conn.	6	Black
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	White
	STSW*	E17 at ECU	4	Red
	12V	Diagnostic Conn.	4	N/A

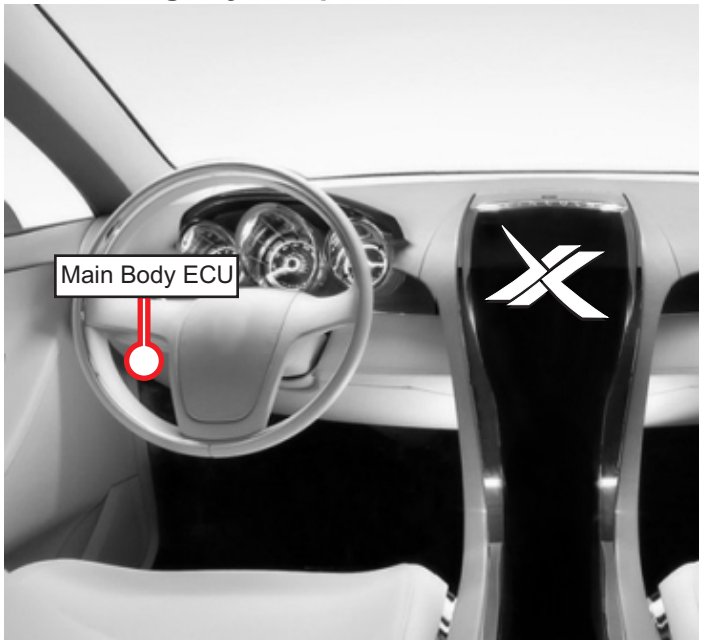
***STSW**: Starter Switch Wire

WARNING

- No take over feature is available.

- To remote start the engine, all doors must be closed, including rear hatch.

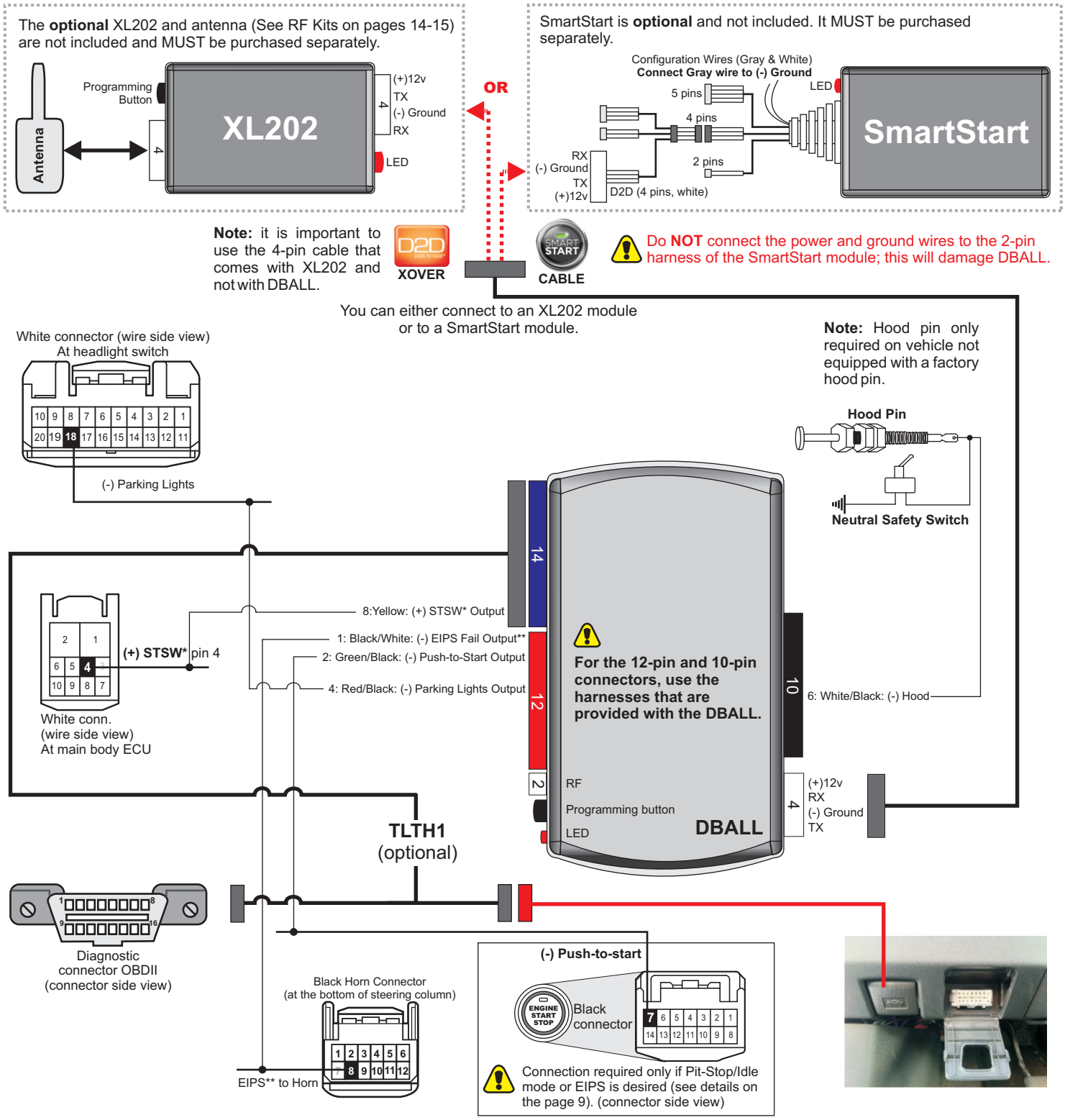
Locating key components in the vehicle



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Installation Type 2a (with T-Harness)

See page 9 for help on locating key components in the vehicle and wiring reference chart.



* **STSW**: Starter Switch Wire
** This connection is only required when EIPS feature is activated or horn will sound when handbrake is applied.

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Installation Type 2b (without T-Harness)

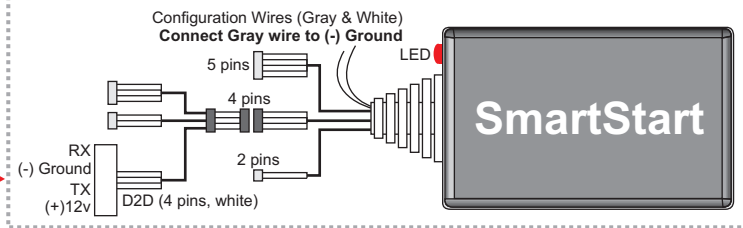
See page 9 for help on locating key components in the vehicle and wiring reference chart.

The **optional** XL202 and antenna (See RF Kits on pages 14-15) are not included and MUST be purchased separately.



OR

SmartStart is **optional** and not included. It MUST be purchased separately.



Note: it is important to use the 4-pin cable that comes with XL202 and not with DBALL.

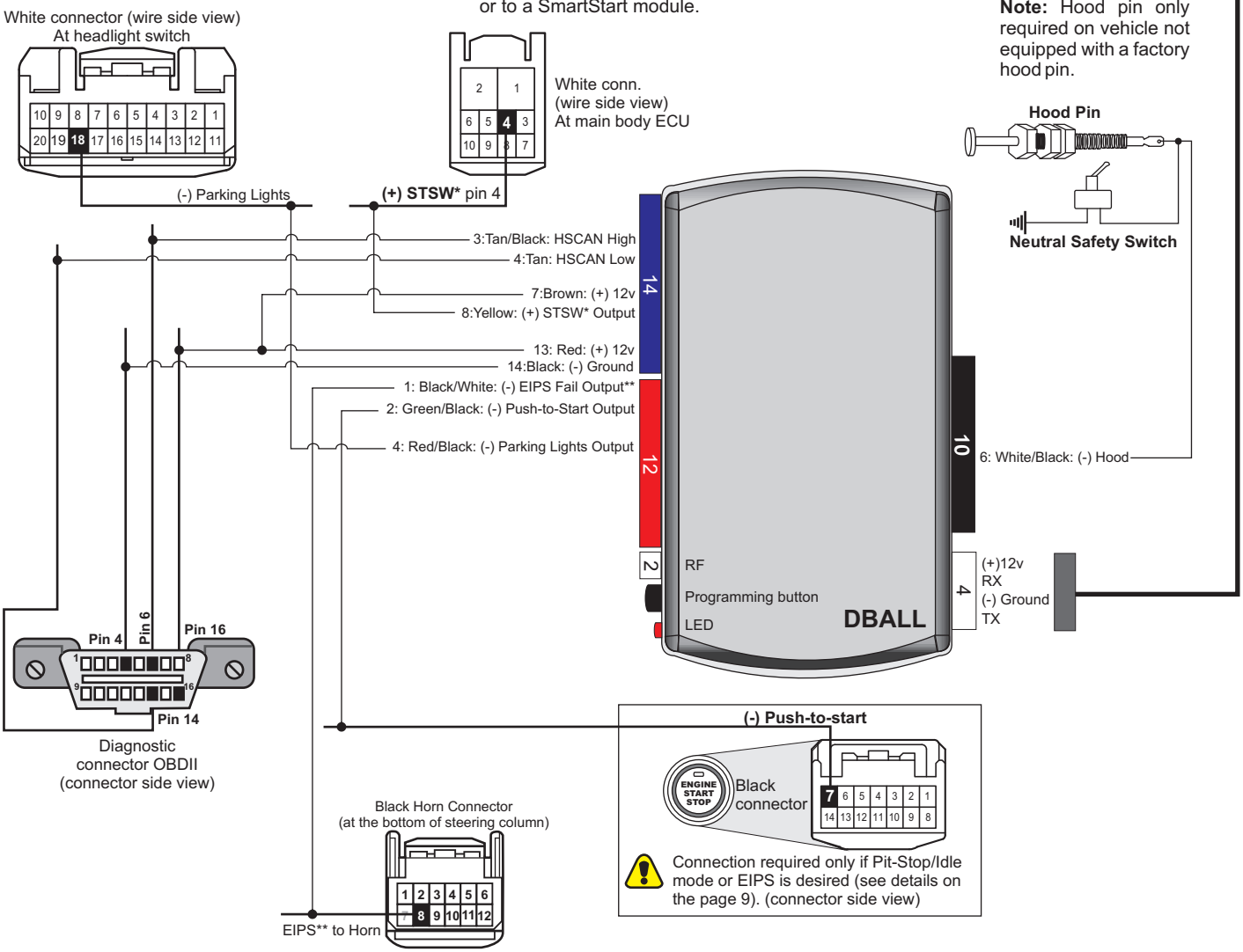
XOVER

CABLE

Do **NOT** connect the power and ground wires to the 2-pin harness of the SmartStart module; this will damage DBALL.

You can either connect to an XL202 module or to a SmartStart module.

Note: Hood pin only required on vehicle not equipped with a factory hood pin.



* **STSW**: Starter Switch Wire

** This connection is only required when EIPS feature is activated or horn will sound when handbrake is applied.

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Vehicle Wiring Reference Chart - Type 2

Vehicles	Wire function	Connector	Pin position	Wire color
Lexus ES350 (Smart Key) 2007-2012	CAN High	Diagnostic Conn.	6	Light Green
	CAN Low	Diagnostic Conn.	14	Pink
	Push-to-start	at PTS button	7	Blue
	STSW*	E58 at ECU	4	Red
	12V	Diagnostic Conn.	4	N/A
Toyota Camry (Smart Key) 2007-2011	CAN High	Diagnostic Conn.	6	Black
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	Blue
	STSW*	E9 at ECU	4	Gray
	12V	Diagnostic Conn.	4	N/A
Toyota Camry Hybrid (Smart Key) 2007-2011	CAN High	Diagnostic Conn.	6	Black
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	Blue
	STSW*	E9 at ECU	4	Gray
	12V	Diagnostic Conn.	4	N\A
Toyota Highlander (Smart Key) 2008-2012	CAN High	Diagnostic Conn.	6	Blue
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	Pink
	STSW*	D10 at ECU	4	Pink
	12V	Diagnostic Conn.	4	N/A
Toyota Highlander Hybrid (Smart Key) 2008-2012	CAN High	Diagnostic Conn.	6	Black
	CAN Low	Diagnostic Conn.	14	White
	Push-to-start	at PTS button	7	Pink
	STSW*	D10 at ECU	4	Yellow
	12V	Diagnostic Conn.	4	N/A

***STSW**: Starter Switch Wire

WARNING

- No take over feature is available.

- To remote start the engine, all doors must be closed, including rear hatch.

Locating key components in the vehicle



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Module Programming

⚠ Refer to the LED Diagnostics section on page 13 for more information and for troubleshooting purposes.

Important

Make all the required connections to the vehicle, as described in the wiring diagram(s) found in this guide, and double check to ensure everything is correct prior to moving onto the next step.

Note: Before connecting either the XL202 or SmartStart module to DBALL, it is important to ensure that the proper feature and function programming is selected using XpressVIP (version 4.5 or higher). Visit www.xpresskit.com to download the latest version of the application.

⚠ **Warning!** To take advantage of advanced features, you must use XpressVIP 4.5 or higher. Using version 2.9 or 3.1 will limit available functions and features.

1. Connect the interface module to your computer using the **XKLoader2**.
2. Open an Internet Explorer browser (version 6 or higher), and go to www.xpresskit.com. The detail of the platform and firmware that is currently saved on the interface module will be indicated in the top left corner of the page.
3. Select the **year**, **make** and **model** of the vehicle; the page will refresh to display the compatible firmware.
4. In the search result page, select one of the available install options (config for RSR, RXT or Standard install), and follow the instructions provided on the screen.
5. Once you have configured your options, click on the **FLASH** button to upload the firmware onto the interface module.
6. The following message will be displayed when the upload is completed:
   "The flashing is successfully completed. You may now unplug the kit."
   You can now proceed with the programming instructions below.

1

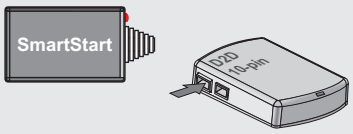
SmartStart Installation (200/250 Revision B)

⚠ The DBALL module **must** be disconnected from any power source before SmartStart can be connected to it. Failing to do so could damage DBALL.

a. Ensure that the Gray wire is connected to a ground source or the D2D communication between the 2 modules will not work.

b. Do **NOT** connect the 2-pin harness (on SmartStart). Power and ground will be provided by the DBALL D2D connector.

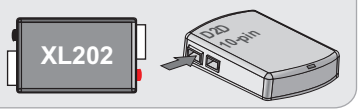
Connect SmartStart to DBALL using the D2D port.



OR

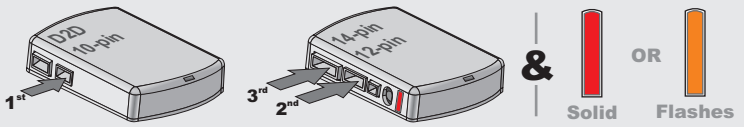
XL202 Installation

Connect XL202 to DBALL using the D2D port.



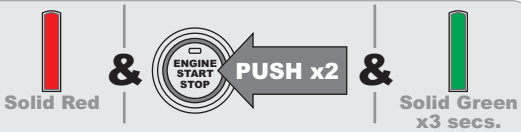
2

Connect the 10-pin, 12-pin and 14-pin harnesses to DBALL, the LED turns ON solid red or flashes orange.



3

The press the vehicle Push-to-Start (PTS) button twice (2) to turn the ignition ON. Wait for the LED to turn ON solid green for three (3) seconds*.



4

Press the vehicle PTS button once (1) to turn the ignition OFF. Wait for the LED to turn OFF. DBALL is now programmed.



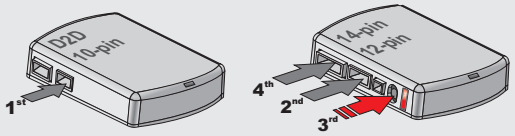
* If the LED becomes orange for 3 seconds and not green, the vehicle is equipped with a factory remote starter. Make sure the DBALL is programmed to execute desired operation. See page 3

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Module Reset

A module reset will only erase programming performed in the previous steps. All settings (firmware) and settings flashed to the module using the web config tool will not be affected.

1 If required for your installation, connect the 10-pin & 12-pin harnesses to the module. Press and hold the programming button, then connect the 14-pin harness to the module.



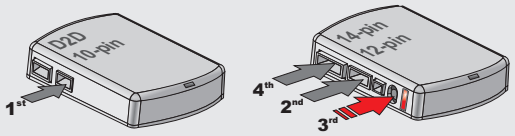
2 Wait 3 seconds until the LED turns ON solid orange then release the programming button. The LED turns ON solid red.



Hard Reset

Warning Against Executing a Hard Reset!
A hard reset will revert the flashed firmware back to its default settings. Depending on the installation, some settings (such as RFTD and D2D options) may have to be reconfigured. See the **Feature & Option List** section of this guide.

1 If required for your installation, connect the 10-pin & 12-pin harnesses to the module. Press and hold the programming button, then connect the 14-pin harness to the module.



2 Wait 3 seconds until the LED turns ON solid orange, and wait 10 more seconds until the LED starts to flash orange and red.



3 Release the programming button. The LED turns ON solid red.



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Feature & Option List

It is recommended to configure all the features and options listed below using the configuration tool found on the module flashing page on www.xpresskit.com. The web offers more options; however, a manual configuration of the features is possible using the information on this page.

Feature	Operation	Flashes / Option	Description
1	RF Output Type	**1. Disabled***	Module is connected to a remote starter using a standard installation.
		2. RFTD Output	Module is connected to an XL202 using an RSR or RXT installation (when available).
		3. SmartStart	Module is connected to SmartStart using an RSR or RXT installation (when available).
2	Unlock Driver Priority	**1. Driver Priority***	Unlocks only the driver door on first press and unlocks all doors on a second press within 5 seconds.
		2. All	Unlocks all doors on first press.
3	Trunk	1. Disabled	1. Disabled: doesn't operate any function in the vehicle. 2. Trunk: Will pop the trunk if available. 3.Tail Glass Opening: When available, will operate the tail glass.
		2. Trunk*	
		3.Tail Glass Opening	
4	Aux1	1. Disabled*	
		2. Trunk	
		3. Tail Glass Opening	
5	Smart OEM Alarm Control	1. Disabled	The OEM alarm will not be controlled by DBALL upon remote start. No disarm or arm command will be executed at the beginning or end of the sequence; it must be controlled by the Remote Starter.
		2. Normal	Smart OEM Alarm Control will behave like a standard Safelock feature on a remote starter. It will unlock at the beginning of the sequence, and relock after start and shutdown.
		3. Smart OEM Alarm Control*	Smart OEM Alarm Control will synchronize with the OEM alarm so that it will disarm and rearm the vehicle in the remote start sequence, only when required. The reason for this is, factory alarm control must often be done by lock or unlock operation. This could create unnecessary actions on door lock modules, such as the horn to honk. When possible, Smart OEM Alarm Control will monitor the alarm and door lock status to detect if the disarm or rearm is required. If the vehicle is unlocked or is not equipped with factory alarm, the disarm/rearm will not be executed. Smart OEM Alarm Control will also monitor the remote starter actions so that the factory alarm control is not done twice. A remote starter, for which the Safelock feature is active, will work perfectly with this option and will make it invisible to the user.

*** Default option**

Feature Programming



To enter feature programming routine
- For vehicles that are not Push-to-Start (PTS), use the key to turn the ignition ON, then OFF. For PTS vehicles, press the button twice to turn the ignition ON, then press it once more to turn it OFF.
- Within 5 sec, press and HOLD the programming button. The orange LED turns ON after 3 seconds. Release the button.
- The green LED starts flashing slowly one time to indicate the feature number is 1. After a short delay, the red LED flashes rapidly to indicate the current option of feature 1. It repeats until next action happens.

Changing feature options
- Press the lock/arm or unlock/disarm button on aftermarket transmitter to change the option of the selected feature.
- The red LED flashes rapidly the number of times equal to the current option number. After a short delay, the green LED flashes slowly the number of times to indicate the current feature. It repeats until next action happens.

Accessing another feature
- Press and release the programming button a number of times to advance from the current feature to the next desired feature.
- The green LED flashes slowly the number of times equal to the feature number. After a short delay, the red LED flashes rapidly to indicate the current option of the current feature. It repeats until next action happens.

When the maximum number of feature or option is reached, the LED will starts flashing again from the first feature or option.

Once a feature is programmed
- Another feature(s) can be programmed.
- The feature programming can be exited.

Exiting feature programming
- No activity for 30 seconds; after 30 seconds, the orange LED will turn ON for 2 seconds to confirm exiting.
  OR
- Press and HOLD the programming button for 3 seconds. After 3 seconds, the orange LED will turn ON for 2 seconds to confirm exiting.

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LED Diagnostics & Troubleshooting

LED	Status	Description	Troubleshooting
Programming the Module			
Solid	Solid Red	Waiting on the completion of a programming sequence, or the ignition is turned on.	This can also mean there is an issue with the data bus wiring. Make sure the connections to the data bus are correct by referring to the wiring diagram.
Flashes	Flashes Orange	Waiting for bypass.	Make sure the connections to CAN are done properly.
Solid x3 secs	Solid Green x3 seconds	Module has been successfully programmed.	Normal operation.
Solid x3 secs	Solid Orange x3 seconds	Module has been successfully programmed into convienience only mode (no bypass).	OEM remote starter has been detected, you can either keep the OEM remote starter mode or disconnect it. See page 3 for more information.
Off	Off	Module has no power.	Make sure the D2D harness is connected or that the 12 Volt is present between the red and black wires. If the 12 Volt is present, the module may be defective.
Remote Starting the Vehicle			
Flashes	Flashes Green	Module is operating correctly.	Normal operation.
Flashes x7	Flashes Red x7	RSR/RXT mode.	RFTD feature has not been activated.
Off	Off	Normal operation.	The Ground While Running (status) wire is incorrectly connected. Refer to the wiring diagram to make the right connections.
While the Ignition is Turned Off			
Flashes x1	Flashes Green x1	Lock feature.	If it does not flash, the bypass module did not receive the signal. Verify the connections between the bypass and the RF module.
Flashes x2	Flashes Green x2	Unlock feature.	
Flashes x3	Flashes Green x3	Trunk release feature.	
Flashes x4	Flashes Green x4	Aux1 function has been executed.	

Parking Light Error Codes

The parking lights on your vehicle will flash a specific number of times 3 seconds following an unscheduled shutdown or failure to start. Each flashing pattern is described below.

Flashes	Diagnostic
1	Runtime expired.
2	Over-rev shutdown.
3	Low/No RPM.
4	Transmitter shutdown.
5	Brake shutdown.
6	Hood shutdown/Remote start safety override switch is ON*.
7	Remote start safety override switch is ON*.

* If the vehicle hood status is supported through data, safety override switch input will report 7 flashes.

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Optional RF Kits

Note: RF kits are sold SEPARATELY. Request an order from Directed using the part numbers listed below.

9211VL



Viper 1-Way Responder ONE - Plug & Play RF Kit with XL202.
UPC: **093207 08488 1**

Also available as:
- Python: 9211PL
- Clifford: 9211XL

9153VL



Viper 1-Way - Plug & Play RF kit with XL202.
UPC: **093207 05660 4**

Also available as:
- Python: 9153PL
- Clifford: 9153XL

9251VL



Viper 2-Way Responder LE - Plug & Play RF Kit with XL202.
UPC: **093207 08489 8**

Also available as:
- Python: 9251PL
- Clifford: 9251XL

9752VL



Viper 2-Way LC3 - Plug & Play RF kit with XL202.
UPC: **093207 08490 4**

Also available as:
- Python: 9752PL
- Clifford: 9752XL

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Optional RF Kits

Note: RF kits are sold SEPARATELY. Request an order from Directed using the part numbers listed below.

AF-RFK623



Astrostart 2-way LED Receiver kit with up to 1,500' of range.

UPC: 093207 08752 3

AF-RFK5225

Astrostart 2-way LCD Receiver kit offering XRT™ technology with up to 5,000' of range.

UPC: **093207 08753 0**



AS-RFK1700



Autostart 1-way Receiver kit with up to 3,000' of range.

UPC: **093207 08738 7**

AS-RFK2300

Autostart 2-way LED Receiver kit offering HDR™ technology with up to 3,000' of range.

UPC: **093207 08739 4**



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Limited One Year Consumer Warranty

For a period of ONE YEAR from the date of purchase of a Directed Electronics remote start or security product, Directed Electronics. ("DIRECTED") promises to the original purchaser, to repair or replace with a comparable reconditioned piece, the security or remote start accessory piece (hereinafter the "Part"), which proves to be defective in workmanship or material under normal use, provided the following conditions are met: the Part was purchased from an authorized DIRECTED dealer; and the Part is returned to DIRECTED, postage prepaid, along with a clear, legible copy of the receipt or bill of sale bearing the following information: consumer's name, address, telephone number, the authorized licensed dealer's name and complete product and Part description.

This warranty is nontransferable and is automatically void if the Part has been modified or used in a manner contrary to its intended purpose or the Part has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defect in materials or construction.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, EXCEPT AS STATED ABOVE, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NONINFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED HEREBY DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING DEALERS OR INSTALLERS. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE PROPER VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE PART. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, THE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR
REPAIR AT DIRECTED'S OPTION THE PART AS DESCRIBED ABOVE.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State. DIRECTED does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this Part.

920-0007 2009-09

This Interface kit / Data Bus Interface part has been tested on the listed vehicles. Other vehicles will be added to the select vehicle list upon completion of compatibility testing. Visit website for latest vehicle application guide. DISCLAIMER: Under no circumstances shall the manufacturer or the distributors of the bypass kit / data bus interface part(s) be held liable for any consequential damages sustained in connection with the part(s) installation. The manufacturer and it's distributors will not, nor will they authorize any representative or any other individual to assume obligation or liability in relation to the interface kit / data bus interface part(s) other than its replacement. N.B.: Under no circumstances shall the manufacturer and distributors of this product be liable for consequential damages sustained in connection with this product and neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than the replacement of this product only.

Protected by U.S. Patents: 5,719,551; 6,011,460 B1 *; 6,243,004 B1; 6,249,216 B1; 6,275,147 B1; 6,297,731 B1; 6,346,876 B1; 6,392,534 B1; 6,529,124 B2; 6,696,927 B2; 6,756,885 B1; 6,756,886 B2; 6,771,167 B1; 6,812,829 B1; 6,924,750 B1; 7,010,402 B1; 7,015,830 B1; 7,031,826 B1; 7,046,126 B1; 7,061,137 B1; 7,068,153 B1; 7,205,679 B1; Cdn. Patent: 2,320,248; 2,414,991; 2,415,011; 2,415,023; 2,415,027; 2,415,038; 2,415,041; 2,420,947; 2,426,670; 2,454,089; European Patent: 1,053,128; Pat. Pending: 2,291,306. Made in Canada.

Additional information can be found at:

www.xpresskit.com
www.directechs.com

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Vehicle Takeover

Important!

No Takeover feature is available on Push-to-start vehicle. The engine will stop when a door is open.

Pit Stop Mode

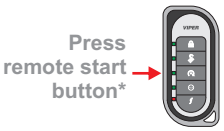
The Pit Stop Mode feature is practical when you need to stop and run an errand, but wish to keep the engine running.

1 Stop the vehicle in a safe parking spot and put the gear in Park (P).



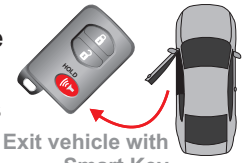
Stop & put vehicle in Park (P)

2 Press the button to remote start the vehicle.*



3 It is now safe to leave the engine running and exit the vehicle with the Smart Key in hand.

Note: We recommend that you always lock the doors of your vehicle when leaving it unattended.



* Your aftermarket remote may differ from the model shown in the illustrations.

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Engine Idle Protection System (EIPS)

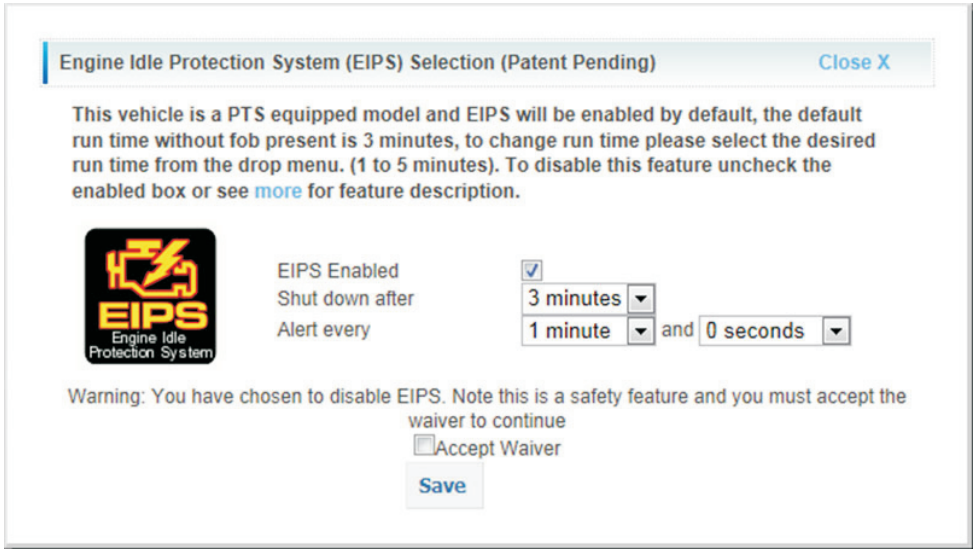
Vehicles equipped with RFID-type Push-to-Start ignition systems work by detecting a proximity key in the vehicle. They will run indefinitely if the key is removed, which could potentially lead users to exiting the vehicle while the engine is still running and the car is left idling on its own in a garage or a confined space.

To mitigate risk, we have designed a feature that is now available on the DBALL. It will detect the presence of the RFID fob in the vehicle, through the CAN bus. If left idling for more than the pre-defined runtime (i.e. 1 to 5 minutes) without detecting the fob, DBALL will send a signal to the vehicle in order to shut off the engine.

EIPS (Engine Idle Protection System) will:

Protection System) will:

- Notify the user about the idling engine by sounding the horn with a series of short beeps.
- Shut down the engine after a pre-defined period of time (i.e. 1 to 5 minutes). EIPS is configured using XpressVIP. The following window is displayed whenever a DBALL module is flashed.



- If the engine fails to shut down due to some malfunction, EIPS will go into alarm mode and will notify the user by all means possible (e.g. horn or siren).

Activating/deactivating EIPS:

- To activate EIPS, remove all keys from the vehicle and close all doors while the engine is running.
- To deactivate EIPS, do one of the following actions:
  - Open one of the doors.
  - Remote start the vehicle.
  - Turn the engine off.
  - Drive the vehicle.*

* The EIPS feature is disabled if the vehicle is in motion so there is no risk that the vehicle will shut off while driving, regardless of the fob being present in the vehicle or not.

Notes

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Available Features

(Must be completed by the installer.)

The following features are available with this product, but may not be compatible with your vehicle. Refer to your installation facility for more information.

☐ Trunk

Note: Additional fees may apply for the installation of the above features.

Notes

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